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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,332

04/06/2007

David W. Morris

PP023362.0003

5041

27476

7590

03/03/2010

NOVARTIS VACCINES AND DIAGNOSTICS INC.

INTELLECTUAL PROPERTY- X100B

P.O. BOX 8097

Emeryville, CA 94662-8097

EXAMINER

HARRIS, ALANA M

ART UNIT

PAPER NUMBER

1643

MAIL DATE

DELIVERY MODE

03/03/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,332	Applicant(s) MORRIS ET AL.	
	Examiner Alana M. Harris, Ph.D.	Art Unit 1643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 1-32 and 37-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>04/10/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group VIII (claims 33 and 34) in the reply filed on November 17, 2010 is acknowledged. The traversal is on the ground(s) that "Groups VIII and IX (claims 35 and 36) are both directed to embodiments that comprise at least two polynucleotides" and consequently a search of both sets of claims would be duplicative and "...should not be an undue burden on the Examiner". This is found persuasive and both Groups will be examined.

The remainder of the requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-55 are pending.

Claims 1-32 and 37-55, drawn to non-elected inventions are not examined on the merits.

Claims 33-36 are examined on the merits.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 35 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claims 35 and 36 are drawn to an electronic library. It is not clear if Applicants intended to state an electronic medium, an array or microarray that comprises sequences. The term, electronic library has not been defined in the specification. Accordingly, the metes and bounds cannot be determined.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 33 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Knoll et al./ U.S. Patent number 7,014,997 B2 (filed May 14, 2001). Knoll discloses sequences that would selectively hybridize to Applicants' SEQ ID NO: 4 and SEQ ID NO: 427, fragments thereof or their complements within in a sample, see sequence alignment information following instant rejection; column 1, lines 36-45; and column 14, lines 56-65. Knoll discloses sequences 425 and 148, which are the same as Applicants' SEQ ID NO: 4 and SEQ ID NO: 427, respectively, corresponding hybridization probes, arrays, and kits in which these components are contained, see abstract; column 2, lines 5-50; column 3, lines 17-25; bridging paragraph of columns 24 and 25; and the claims beginning in column 37. These components are useful in detecting "[c]hromosomal abnormalities often common and ...diagnostic in...leukemia and other cancers", see column 2, 1st full sentence.

Art Unit: 1643

In absence of a clear definition of the term, electronic library as cited in the pending 112, 2nd paragraph rejection, the art reads on claim 35. The Examiner regards the cited arrays as the equivalent of Applicants' electronic library.

Search results between Applicants' SEQ ID NO: 4 and Knoll sequence 425.

```
US-09-854-867-425, rni
; Sequence 425, Application US/09854867
; Patent No. 7014997
; GENERAL INFORMATION:
; APPLICANT: JOAN, KNOLL H
; APPLICANT: ROGAN, PETER K
; TITLE OF INVENTION: SINGLE COPY GENOMIC HYBRIDIZATION PROBES AND METHOD OF GENERATING SAME
; FILE REFERENCE: 30307
; CURRENT APPLICATION NUMBER: US/09/854,867
; CURRENT FILING DATE: 2003-05-08
; NUMBER OF SEQ ID NOS: 613
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 425
; LENGTH: 3285
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
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Query Match          24.1%; Score 289.6; DB 5; Length 3285;
Best Local Similarity 65.9%;
Matches 567; Conservative 5; Mismatches 216; Indels 72; Gaps 8;
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Qy      34 CAAAGAAATAAGAGAAACACATAAAGCAAGAAATAAGAGAAACACATAATTCAACAATAA 93
      ||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      365 CAAAATACATAAAGCAAATACTAATAGAACTGAAAAGAGAAATAGACAAATCCACAATAA 424

Qy      94 TA----GAAACTTAAATATCCTCCTTTCAATAATAGATACAACAACCTAAGCAGTTGATCA 149
      || | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db      425 TAGTTGGAGACTTCAATACCCCACTGTCTAGTAATTGATAGATCAACTAGACAGAAAATCA 484

Qy     150 ACAAGAAAACAGAGATTTGAACAATGCTATGAACCAACTAGACCTAACGTCTA---TCT 206
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     485 ATAAGGATATAGAAGACTTGAACAACACTATCAACCAACTGGACCTAATTGACATATTAT 544

Qy     207 ATAAACACACCACCAACAACAGCAGAATACATATTCTTCTCAGATATACATAGAACATTC 266
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     545 AGAACACTCCACCAACAACAGCAGAATACACATTCTTCTCAAGTGCACATGGAACATTC 604

Qy     267 TCCAGGATAGGCCATCTGTTAGGACATAAAACAAGTCTCAAAAAATGTAAAAGAATTGAG 326
      || | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     605 ACCAAGATAGACCATATGCTRGCCATAAAACAAGTCTCAATAAATTTAAAAAATTGAA 664

Qy     327 ATCAGACAAAGTCTGTTCTCTGACCACAA-----CCAGTAACAGAAG 368
      ||:| | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     665 ATYATACAAAGTATGTTCTCTGACCACAAATGAATAAAAWTAGAAATCAATAACAAAAAG 724

Qy     369 GAAATTTGAAGAATCCATAAGTATGTGGAAATGAATCAAGGAACT----- 413
      | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     725 ATACTCTGGAAAATNCACAAATACTTGGAAATTAAACAACATACTTCTAAATAACTCATG 784
```

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Qy 414 -----CAAGGGAAATTAGAAAATCTTTGAAATGAATGAAATGAAAA 456
 Db 785 GGTCAAAGAAGAAATCAAAAGAGAAATTAATAATATTTTGAATAAATGAAATGAAAA 844

Qy 457 CACAGCATACCAAAAC-TTATGAGATGCAGCTAAAATAGTGCTTACAGAGAAATTAATAG 515
 Db 845 YACAACATATCAAAAATTTATGGGATGCAGCTAAAGCAGTGCTTAGAGGGAAATTTATAG 904

Qy 516 CTATTAATGCCTGTATTTTTTAAAGAAGAAAGATACCAAATTAACCACTTTTCAC 575
 Db 905 CATTAAATGCC--TATATTAAGAAAGAAAGATCTCAATCAATAACCTAAGTTTCCA 962

Qy 576 TTT-----AAGAAAAAGAATAGTGAACCAAGCCCAAATCAAGCAGAAGGAAGGAAAT 627
 Db 963 CCTTAAGAACTAGAAAAAGAAGAGCAAAATTAACCCAAAGTAAGCAGAAGAAAGGAAAT 1022

Qy 628 AATAAAGATTAGAAATGGAAAAAATGAAATATGGAATTGGAAAACTAGAGAAAAATTAA 687
 Db 1023 AATAAAGATTAGAGCAGAAATAAATGAAATAGAAAACAGAAAAACAATAGAAAAATCAA 1082

Qy 688 CAAACCCAAAAGTTGTTATATCAAAAAGATTGATAAGTTTGATAAACATTTAAGTAGACT 747
 Db 1083 TAAACCCAAAAGTTGGTTCTTTGAAAA---GATAAAATTGACAAACCTTTAGCTAGACT 1138

Qy 748 TACCCTAATATCAAAACCACATACAGATATCACAAGAAAAGTACAGACCAATATCTCTCA 807
 Db 1139 AAAAAAAGAGAGAAGACCAAATTACTAATANATCAGAAATGAAAGAGGAGAYATTACT 1198

Qy 808 TAAGACACATATAAGATAGA 827
 Db 1199 ACAGATYCTACAGAAATAAA 1218

Search results between Applicants' SEQ ID NO: 427 and Knoll sequence 148.

Result No.	Score	Query Match	Length	DB	ID	Description
1	1200	100.0	76360	16	US-10-669-920-427	Sequence 427, App
2	1200	100.0	76360	19	US-10-573-332-427	Sequence 427, App
3	939	78.2	75853	7	US-10-087-192-382	Sequence 382, App
c 4	506.6	42.2	665590	18	US-10-990-328-94275	Sequence 94275, A
c 5	484.6	40.4	161994	24	US-11-112-908-57	Sequence 57, Appl
c 6	484.6	40.4	303956	27	US-11-033-056A-36950	Sequence 36950, A
c 7	483	40.2	29142	10	US-10-741-600-17977	Sequence 17977, A
c 8	483	40.2	29142	17	US-10-796-280-12569	Sequence 12569, A
c 9	483	40.2	29142	36	US-12-287-505-17977	Sequence 17977, A
c 10	483	40.2	29142	36	US-12-337-905-17977	Sequence 17977, A
11	473.8	39.5	130877	9	US-10-322-281-54	Sequence 54, Appl
12	473.8	39.5	130877	16	US-10-539-228-54	Sequence 54, Appl
c 13	464.8	38.7	102139	18	US-10-990-328-95533	Sequence 95533, A
14	464.8	38.7	439596	27	US-11-033-056A-37873	Sequence 37873, A
c 15	460.4	38.4	50498	17	US-10-105-299-9098	Sequence 9098, Ap
c 16	460.4	38.4	50498	18	US-10-868-184-6947	Sequence 6947, Ap
c 17	448.2	37.4	699032	18	US-10-990-328-96764	Sequence 96764, A
18	446.2	37.2	330955	36	US-12-113-481-90	Sequence 90, Appl
19	445	37.1	340000	24	US-11-102-978-3	Sequence 3, Appli
c 20	444.6	37.1	103000	27	US-11-033-056A-38751	Sequence 38751, A
c 21	441	36.8	2418	3	US-09-854-867-148	Sequence 148, App
c 22	441	36.8	2418	11	US-10-786-970A-148	Sequence 148, App

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7. Claims 33 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Cargill et al./ U.S. Patent Application Publication number 2005/0026169 A1 (effective filing date April 30, 2003). Cargill discloses sequences that would selectively hybridize to Applicants' SEQ ID NO: 4 and SEQ ID NO: 427, fragments thereof or their complements within in a sample, see sequence alignment information following instant rejection; page 3, sections 0023 and 0024; and page 14, section 0153. Cargill discloses sequences 17996 and 17977, which are the same as Applicants' SEQ ID NO: 4 and SEQ ID NO: 427, respectively, corresponding hybridization probes, arrays, DNA chips and kits in which these components are contained, see abstract; page 14, sections 0154 and 0155; page 15, section 0162; and page 16, section 0173-page 18, section 0186.

In absence of a clear definition of the term, electronic library as cited in the pending 112, 2nd paragraph rejection the art reads on claim 35. The Examiner regards the cited arrays and chips as the equivalent of Applicants' electronic library.

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Search results between Applicants' SEQ ID NO: 427 and Cargill sequence 17977.

US-10-741-600-17977, rnpbm

```
; Sequence 17977, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17977
; LENGTH: 29142
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-17977
```

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Query Match          40.2%; Score 483; DB 10; Length 29142;
Best Local Similarity 73.0%;
Matches 788; Conservative 0; Mismatches 215; Indels 76; Gaps 10;
```

```
Qy      130 AAAAATACAAAATTAGCTGGGTGTGGTGGTGCATGTCTGTAATCCCAGCTACTCAGGAG 189
        |||||      || || | || | |||| | || | ||||| ||||| |||||
Db      26298 AAAAATATTTTTTTTGGCCGAGTGCGGTGGCTCATGCCTGTAATCCCAGCTACTCAGGAG 26239

Qy      190 GCTGAGGCTTGAACCTGG-----GAGTCAGAGGTTGCAATGAGCCGAGATCGCAC 239
        ||||| || | | | | | || | ||||| ||||| ||||| |
Db      26238 GCTGAGGCAGGAGAATCGCTTGAACCTAGAAGCAGAGGTTGCAGTGAGCTGAGATCATGC 26179

Qy      240 CACTGCACTCCAGCCTGGC-----GACAGAGCAAGACTCCTTGTCAAAA--AAAAAAA 290
        || | ||||| ||||| || | | | | | | | |||| | ||
Db      26178 CACGGCACTCCAGCCTGGCCGACAGAGCCGACGAAGGAGTTGGTCTCAACAGTGGCTTAA 26119

Qy      291 AAAATTTCAGTAAACCATACTGTAAACAGATGTGCTGTCATTACAGGCTTAGTTATGCCATT 350
        || || | || | ||||| || | ||||| ||||| ||||| || | ||||
Db      26118 AATGTTTCGGTAAACCATGCTGGGAACAGATGGGCTGTCATCCAGGCTTTGTTGTTCATC 26059

Qy      351 TACTGAACACAAGCAGAGTAGATTTAGCATAATTTCTAACAGCAATAGGATTTTGAAT 410
        || | || | |||| | ||||| ||||| || | || | | | ||||| | |||
Db      26058 CACAGAGCACAGGCAGAATAGATTTAGCATCATCTTAAGAGCCCTGGGATTTTCGGAAT 25999

Qy      411 GGTAAATGAACACTGGCTTCGACTTAACTCACCAGCTGCATTACCTCCTAACAAGAGAG 470
        ||||| || | ||||| ||||| ||||| ||||| || | || | || | |||
Db      25998 GGTAAATGAGCATTGGCTTCAACTTAAAGTCGCCAGCTGCATTAGC-----CCTAACGAG 25944

Qy      471 AGTCAGCCTGTCTCTTGAAGCTCTGAAGCCAGACATTGACTT---ATCTGTAGCTAGAAA 527
        ||||| ||||| ||||| ||||| ||||| ||||| ||||| || | ||
Db      25943 AGTCAGCCTGTCTCTCGAAGCTTTGAAGCCAGGATTGACTTCTCTTCTGTAGCTATGAA 25884

Qy      528 AGTCCTAGATTACATCTTCTTCCAATAGAAGGCTGTTTTATTATTTACATTAAA----- 578
        |||| | | | | ||||| ||||| ||||| || | || | || | |||
Db      25883 AGTCCCAGGTGGCATCTTCTTCCAATAGAAGGCTGTTTGTCTACATTGAAAGTCTGTTTT 25824

Qy      579 -----AAATCTATGATCTTAGCTAGATCTTCTGGATGACTTGCTGCAGCT 623
        || || | | ||||| ||||| ||||| ||||| |||||
Db      25823 TGAGTGTAGCCACCTTCGTCAGTGAGATCAGCTAGATCTGATGGATAACTTACTGCAGCT 25764

Qy      624 TCTACATCAGCACTTGCTGCTTCACCTTGCACCTTTATTATATGGAGATGGCTTGTTTCC 683
        || | ||||| ||||| ||||| ||||| || | || | || | |||
Db      25763 TCTCCATCAGCACTTGCTGCTTCACTTTTGCACTTTTATGTTACAGAGACGGCTTCTTTCT 25704

Qy      684 TTAAGTTG---AAGCAGCCTCTGCTAACTTCCAACCTTTTCTTTTGCTGCTTCTCATCA 739
        || | | | |||| | || | ||||| || | || | || | || |
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Db	25703	TTCAACCTTCACAAAACAACCTCTGTTAGCTTCTGACTTTTCTTCTGCAACTTTTCTCACCT	25644
Qy	740	CCCTCAGCCTTTCACAGAATTGAAGAGAGTTAGGGCATTGCTATGGATTAGGCTTTGGCTT	799
Db	25643	CTCTCTGCCTTCAAAAGGATTGAAGAGAGTGAGGGCCTTTCTCCGGAAGTGGCTTTGGCTT	25584
Qy	800	AAGGGAATGTTATGGCTGGTTTGATCTTCTATCCAGATCACCCAAACTTTCTCCCATATC	859
Db	25583	AAAGGAATGTTGTGGCTGATTGTATCTTCTTTCCAGA----CTCAAACCTTTCTCCGTATC	25528
Qy	860	AGCAATAATGCTGTTTTGCTTTTTTGTCAATTCATATGTTCACTGGAGTAGCACTTTTAAAT	919
Db	25527	AGCAATAATGCTATTCTGCTTTCATATCATTGTGTGTCCACTAGAGCAGCACTTTTAAAT	25468
Qy	920	T-----TTTTTTTTTTCCTTGATACAGAGTCTCGCTCTGTCAACCCAGGC	963
Db	25467	TTAATTTATCATTTTTATTTTTTATTGTTTTGAGACAGAATTTCTGCTCTGTCAACCCAGGT	25408
Qy	964	TGGAGTGCAATGGCGTGGTCTCGGCTCACTGCAACCTCAGCCTCCTGGGTTC AAGTGGTT	1023
Db	25407	TGGAGTGCAAGTGGTGCGATCTTGACTCATGGTAACCTCCGCCTCCCCACTTCAAGCGATT	25348
Qy	1024	CTCCC GCCTCAGCCTCCAGAGTAGCTGGGGCTACAGGGGCGCGCCACCACACCCAGC-CA	1082
Db	25347	CTCCTGCCTCAGCGTCTTAAGTAGTTGCGAGTACAGGCATGCACCACGCCCCAGCTAA	25288
Qy	1083	GTTTTTGTATTTTTAGTAGACACGGGGTTTCACTATGTTGGCCAGGCTGGACTCGAACT	1141
Db	25287	TTTTTGTATTTTTAGTAGAGATGGGGTCTTGCCATGTTGGCCAGGCTGGTCTCGAACT	25229

rni. Search results between Applicants' SEQ ID NO: 4 and Cargill sequence 17996.

Result	Query						
No.	Score	Match	Length	DB	ID	Description	
1	289.6	24.1	3285	3	US-09-573-080A-425	Sequence 425,	App
2	289.6	24.1	3285	5	US-09-854-867-425	Sequence 425,	App
3	245.8	20.5	278866	3	US-09-949-016-13922	Sequence 13922,	A
4	245.8	20.5	278866	3	US-09-949-016-13923	Sequence 13923,	A
5	245.8	20.5	278866	3	US-09-949-016-13924	Sequence 13924,	A
6	245.8	20.5	278866	3	US-09-949-016-13925	Sequence 13925,	A
7	245.8	20.5	278866	3	US-09-949-016-13926	Sequence 13926,	A
8	245.8	20.5	278866	3	US-09-949-016-14699	Sequence 14699,	A
9	245.8	20.5	278866	3	US-09-949-016-14700	Sequence 14700,	A
10	245.8	20.5	278866	3	US-09-949-016-14701	Sequence 14701,	A
11	245.8	20.5	278866	3	US-09-949-016-14702	Sequence 14702,	A
12	245.8	20.5	278866	3	US-09-949-016-14703	Sequence 14703,	A
13	232.8	19.4	999	10	US-10-301-480C-341210	Sequence 341210,	
14	220.6	18.4	148783	3	US-09-949-016-15729	Sequence 15729,	A
15	215.2	17.9	998	10	US-10-301-480C-367650	Sequence 367650,	
16	215.2	17.9	999	10	US-10-301-480C-267544	Sequence 267544,	
17	215.2	17.9	999	10	US-10-301-480C-367649	Sequence 367649,	
18	212.2	17.7	7678	3	US-09-573-080A-348	Sequence 348,	App
19	212.2	17.7	7678	5	US-09-854-867-348	Sequence 348,	App
c 20	211.8	17.7	41665	8	US-10-741-600-17996	Sequence 17996,	A

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8. Claims 34 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Venter et al./ U.S. Patent number 6,812,339 B1 (filed September 10, 2001). Venter discloses sequences that would selectively hybridize to Applicants' SEQ ID NO: 53 and SEQ ID NO: 622, fragments thereof or their complements within in a sample, see sequence alignment information following instant rejection; column 5, lines 32-47; and column 18, lines 24-63. Venter discloses sequences 340 and 3171, which are the same as Applicants' SEQ ID NO: 53 and SEQ ID NO: 622, respectively, corresponding hybridization probes, arrays, DNA chips, computer-based and data storage systems and kits in which these components are contained, see column 14, lines 39-54; and columns 15 and 16.

In absence of a clear definition of the term, electronic library as cited in the pending 112, 2nd paragraph rejection, the art reads on claim 35. The Examiner regards the cited arrays, chips and systems as the equivalent of Applicants' electronic library.

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Search results between Applicants' SEQ ID NO: 53 and Venter sequence 340.

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RESULT 3
US-09-949-016-340, rni
; Sequence 340, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 340
; LENGTH: 1145
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-340
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Query Match          50.1%; Score 305.4; DB 3; Length 1145;
Best Local Similarity 99.7%; Pred. No. 8.2e-75;
Matches 306; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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Qy      95 AGCAGGACAGGCTGCTTTGGTTTGTGACCTCCAGGCAGGACGGCCATCCTCTCCAGAATG 154
      |||
Db      79 AGCAGGACAGGCTGCTTTGGTTTGTGACCTCCAGGCAGGACGGCCATCCTCTCCAGAATG 138

Qy     155 AAGATCTTCTTGCCAGTGCTGCTGGCTGCCCTTCTGGGTGTGGAGCGAGCCAGCTCGCTG 214
      |||
Db     139 AAGATCTTCTTGCCAGTGCTGCTGGCTGCCCTTCTGGGTGTGGAGCGAGCCAGCTCGCTG 198

Qy     215 ATGTGCTTCTCCTGCTTGAACCAGAAGAGCAATCTGTACTGCCTGAAGCCGACCATCTGC 274
      |||
Db     199 ATGTGCTTCTCCTGCTTGAACCAGAAGAGCAATCTGTACTGCCTGAAGCCGACCATCTGC 258

Qy     275 TCCGACCAGGACAACCTACTGCGTGACTGTGTCTGCTAGTGCCGGCATTGGGAATCTCGTG 334
      |||
Db     259 TCCGACCAGGACAACCTACTGCGTGACTGTGTCTGCTAGTGCCGGCATTGGGAATCTCGTG 318

Qy     335 ACATTGCGCCACAGCCTGAGCAAGACCTGTTCCCGGCCTGCCCCATCCCAGAAGGCGTC 394
      |||
Db     319 ACATTGCGCCACAGCCTGAGCAAGACCTGTTCCCGGCCTGCCCCATCCCAGAAGGCGTC 378

Qy     395 AATGTGG 401
      |||||
Db     379 AATGTTG 385
```

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Search results between Applicants' SEQ ID NO: 622 and Venter sequences 3171 and 3172.

Result No.	Score	Query Match	Length	DB	ID	Description
1	3270.8	79.0	4574	8	US-10-648-593-132	Sequence 132, App
2	3270.8	79.0	4574	8	US-11-072-175-132	Sequence 132, App
3	2841.2	68.6	4268	3	US-09-954-556-3	Sequence 3, Appli
4	2525.8	61.0	3416	2	US-08-451-822A-15	Sequence 15, Appl
5	2525.8	61.0	3416	3	US-08-323-430-15	Sequence 15, Appl
c 6	2425.6	58.6	4367	5	US-10-021-698A-3641	Sequence 3641, Ap
7	2413.8	58.3	3025	3	US-09-954-556-23	Sequence 23, Appl
8	2335	56.4	3080	3	US-09-954-556-25	Sequence 25, Appl
9	2269	54.8	3106	7	US-10-701-263-1	Sequence 1, Appli
10	2199.2	53.1	3244	3	US-09-954-556-24	Sequence 24, Appl
c 11	2199.2	53.1	3244	5	US-10-021-698A-3626	Sequence 3626, Ap
12	1957	47.3	2310	2	US-08-471-570-9	Sequence 9, Appli
13	1949.6	47.1	2923	3	US-09-954-556-20	Sequence 20, Appl
14	1944.4	47.0	2826	3	US-09-954-556-21	Sequence 21, Appl
15	1943	46.9	2868	3	US-09-954-556-19	Sequence 19, Appl
16	1943	46.9	2941	3	US-09-954-556-18	Sequence 18, Appl
17	1834.4	44.3	2650	3	US-09-954-556-28	Sequence 28, Appl
18	1834.4	44.3	2676	2	US-08-471-570-7	Sequence 7, Appli
19	1688.4	40.8	3306	3	US-09-954-556-10	Sequence 10, Appl
20	1583	38.2	1603	2	US-08-471-570-3	Sequence 3, Appli
21	1460.4	35.3	1954	2	US-08-471-570-5	Sequence 5, Appli
22	1332.8	32.2	2079	3	US-09-949-016-3171	Sequence 3171, Ap
23	1332.8	32.2	2079	3	US-09-949-016-3172	Sequence 3172, Ap
24	1332.8	32.2	2079	3	US-09-949-016-3173	Sequence 3173, Ap

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alana M. Harris, Ph.D. whose telephone number is (571)272-0831. The Examiner works a flexible schedule, however she can normally be reached Monday through Saturday, 7:30 am to 6:30 pm with alternate Fridays off.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Larry R. Helms, Ph.D. can be reached on (571) 272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alana M. Harris, Ph.D.
26 February 2010
/Alana M. Harris, Ph.D./
Primary Examiner, Art Unit 1643